DOCUMENT RESUME

ED 322 768 FL 018 779

AUTHOR Dooley, Robert A.
TITLE Switch Reference in Mbya Guarani: A Fair-Weather Phenomenon.
INSTITUTION Summer Inst. of Linguistics, Grand Forks, N. Dak.
PUB DATE 89
NOTE 28p.; In: Work Papers of the Summer Institute of Linguistics 1989, University of North Dakota Session, Volume 33; see FL 018 773.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Grammar; *Language Patterns; Language Research; Linguistic Theory; *Sentence Structure; Uncommonly Taught Languages
IDENTIFIERS Markedness; *Mbya Guarani; *Referents (Linguistics)

ABSTRACT

Switch reference, in which certain clauses contain a signal indicating whether that clause has the same or a different subject, is examined in Mbya Guarani. It is found that most cases can be covered by a grammatical rule stated in terms of the grammatical subjects of the two clauses involved, yielding "same subject" and "different subject" markers. In sentences where this subject-related dichotomy is complex, switch-reference marking can instead be used to indicate facts of a semantic or pragmatic nature, such as whether the clauses have the same agent/topic or the same semantic type. These are considered marked uses of Mbya switch reference. Certain aspects of these uses can be described by rules similar to grammatical ones, but the description is essentially external, depending on factors outside the formal system. Mbya switch reference is therefore one example of linguistic phenomena conditioned by grammatical features and amenable to description by grammatical rule, but only in the unmarked case. In marked modes of use, they are conditioned by extragrammatical factors. More specifically, Mbya switch reference is a "fair-weather phenomenon" whose marked uses are triggered by complexities arising with its unmarked use. Further questions arising from this analysis are discussed briefly. (MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SWITCH REFERENCE IN MBYA GUARANI: A FAIR-WEATHER PHENOMENON

Robert A. Dooley

ED322768

1 Introduction
2 Phenomena requiring more than one type of description
  2.1 Internal and external descriptions
  2.2 Marked and unmarked modes of use
  2.3 On-call phenomena and fair-weather phenomena
3 Signalling grammatical subject: straightforward cases
  3.1 Switch reference markers
  3.2 Subject, agent, and topic
    3.2.1 Subject vs agent
    3.2.2 Subject vs topic
  3.3 Subject sets
4 Strict inclusion of nonempty subject sets
  4.1 Strict inclusion with different grammatical person
  4.2 Strict inclusion with same grammatical person
  4.3 Agent/topic
5 Empty subject sets
  5.1 Impersonal passives, temporal, and ambient clauses
  5.2 Only one empty subject set
  5.3 Two empty subject sets
    5.3.1 Clauses of the same semantic type
    5.3.2 Clauses of mixed types
6 Residual factors
7 Concluding remarks

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
R. Dooley
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

1 INTRODUCTION

SWITCH REFERENCE is a phenomenon found in some languages, by which certain clauses contain a signal indicating whether that clause has the same or different subject referent as a neighboring clause. Following Haiman and Munro (1983:xii), I refer to the clause in which the switch-reference marking is found as the MARKING CLAUSE, and the clause with reference to which same or different subject is calculated as the REFERENCE CLAUSE.

Haiman and Munro (p. xi) observe that, for the purposes of switch reference, "characterization of the notion 'subject' is strictly syntactic, rather than semantic or pragmatic in most cases: it is not the agent or the topic whose identity is being traced." Switch reference in the Mbyá dialect of Guarani[1] follows this characterization, in the following sense: "in most cases", switch reference signals sameness or difference of grammatical subject; but in exceptional circumstances, it signals sameness or difference of other kinds, involving semantic or pragmatic information that is

FL018779

BEST COPY AVAILABLE

different from grammatical subject reference. The signalling of subject reference can be considered to be the unmarked use of switch reference in Mbyá, occurring in the vast majority (over 98%) of cases; the signalling of other, semantico-pragmatic information is a marked use.

The "exceptional circumstances" that give rise to the marked use can be broadly characterized as those that would make its unmarked use difficult; that is, situations in which the calculation of sameness or difference of subject reference cannot be accomplished in a straightforward manner. Notably, this occurs when the subject referents of the two given clauses are in a strict inclusion relationship or when neither clause has subject reference. Abandoning the unmarked use because of difficulties suggests the notion of "fair-weather phenomenon"; this will shortly be explained further.

Section 2 discusses phenomena that require more than one type of description, briefly exploring several distinctions relevant to a mixture of grammatical and extragrammatical facts. Section 3 presents straightforward cases in the unmarked use of Mbyá switch reference. Complications for the unmarked use are presented as arising from the strict inclusion of subject reference (Section 4) and from empty subject reference (Section 5). In Section 6 there is a brief discussion of some questions raised by fair-weather phenomena.

2 PHENOMENA REQUIRING MORE THAN ONE TYPE OF DESCRIPTION

In this paper, I will claim that switch-reference marking in Mbyá has several modes of use, which require different kinds of description. Specifically, I claim that there is an unmarked mode of use that has a grammatical ("internal") description, as well as other, marked modes of use that require extragrammatical ("external") descriptions. Among phenomena with such marked and unmarked modes, we can further distinguish at least two subtypes: on-call phenomena and fair-weather phenomena; Mbyá switch-reference marking is of the latter type.

2.1 Internal and external descriptions

Consider a syntactic phenomenon which can be accounted for by means of a rule involving only grammatical features, such as grammatical subject, and another phenomenon which can be satisfactorily accounted for only if extragrammatical factors, such as the discourse-pragmatic notion of topic, are brought in. In Hyman's (1984) terms, the first phenomenon has an internal explanation, while the second calls for an external explanation: "an internal explanation will propose an account in terms of the nature of syntax itself, while an external explanation will attempt to relate the syntactic

BEST COPY AVAILABLE

problem to phenomena outside the realm of syntax (e.g. semantics or pragmatics)" (Hyman 1984:67). I prefer the term "description" to "explanation" in this context.

If we require that a valid description have observational adequacy (i.e., that it hold for all instances of the phenomenon (Chomsky 1965)), then the distinction between internal and external descriptions becomes sharper and more useful. If, for example, an internal description covers only 85% of the given instances, then we should consider formulating either some other kind of internal description or else put forward an external description. A similar thing holds if we find ourselves with an external description that is less than observationally adequate (Nunberg 1981).

It is possible for a phenomenon to have both a valid internal description and a valid external description; this appears to be the case with the positioning of the Wayampi interrogative marker **po** (Dooley (to appear), section 4.3). Many phenomena with valid internal descriptions, however, appear to have external descriptions or explanations that are only partially valid. These are grammatical phenomena that are only partially motivated by extragrammatical factors.

Are there phenomena without a valid description of either type? The view of language as an organized activity would seem to be against this; however, it is not uncommon for descriptions of whatever type to end up with a certain amount of intractible "residue". The assumption adopted here is that if a phenomenon as a whole does not have a valid description of either type, then it can be broken down into different modes of use, each having a valid description of one or the other type. That, at least, is the methodology this paper adopts and illustrates, taking switch reference in Mbyá as a case in point.

2.2 Marked and unmarked modes of use

In this paper it is claimed not only that Mbyá switch reference has different modes of use requiring different kinds of descriptions, but that one mode of use is unmarked, while the rest are marked. Here, the unmarked option is considered to be that one which is least conditioned. Of the kinds of factors that might condition a given phenomenon, we can say (other things being equal) that internal factors provide less conditioning than external factors, since internal factors are closer to the phenomenon at hand. Thus, for a (morpho)syntactic phenomenon like switch reference, a mode of use having an internal (syntactic, grammatical) description should probably be considered the unmarked one, while modes of use requiring external (extrasyntactic, semantic or pragmatic) descriptions should be considered as marked.

Consider switch reference with the following two modes of use:

(a) signalling difference vs sameness of grammatical subject;
(b) signalling difference vs sameness of topic (a pragmatic role) or agent (a semantic role).

According to the above, we would consider (a) the unmarked mode of use, particularly if (b) were relatively infrequent. This is what we find in Mbyá (though the picture is presented in a somewhat oversimplified form at this point): there is an unmarked mode of use that has an internal (grammatical) description, and a marked mode of use that requires an external (extragrammatical) description.

2.3 On-call phenomena and fair-weather phenomena

Consider now phenomena of the type just described: those with a marked mode of use requiring external description. What is the origin of the conditioning for this marked use? Again making recourse to Hyman's terminology, this conditioning may arise either from substance or from form. In syntax, "substance is pragmatics, i.e. intrinsic properties of communication", whereas form refers to the syntax itself (p. 71).

If the conditioning arises from the substance -- if, for instance, there are strong semantic or pragmatic conditions in the context which lead the speaker to lay aside the unmarked use in favor of the marked one -- then we have what we might think of as an ON-CALL PHENOMENON: it stays within its unmarked use until it is called upon, because of the substance of communication, to manifest a marked one. If, however, the conditioning for the marked use arises from the form -- for example, if at a certain point complexities arise in assessing whether the proper (morpho)syntactic conditions hold for the unmarked use -- then we can think of the phenomenon as a FAIR-WEATHER PHENOMENON: intuitively, it stays with the unmarked usage unless that course becomes too difficult.

Both kinds of phenomenon are found in Mbyá, and perhaps in many other languages as well. The positioning of certain kinds of particles within the sentence is an on-call phenomenon: they have an unmarked, grammatically-determined position in the verb phrase or at the end of the sentence, but the speaker may choose to place them instead "in the cracks" between pragmatic constituents, to help bring out the pragmatic structuring of the utterance (Dooley 1982 and to appear). By contrast, as will be shown in this paper, Mbyá switch reference is a fair-weather phenomenon: it only departs from the signalling of grammatical information when that course involves a high degree of complexity.

3 SIGNALLING GRAMMATICAL SUBJECT: STRAIGHTFORWARD CASES

The analysis set forth in this paper, then, is that switch-reference marking in Mbyá requires different kinds of descriptions for different modes of use. There is an unmarked use, which can be described in grammatical terms: the signalling of same or different grammatical subject. There are also different modes of marked use, requiring certain kinds of extragrammatical information in their description. At this point, after introducing the switch reference markers, I consider some examples of their unmarked use.

3.1 Switch reference markers

Mbyá switch-reference markers are a type of subordinating conjunction; all such conjunctions are enclitic to the subordinate clause:[2]

(1) **vy** 'same subject'
[Ava o-o **vy**] mboi o-exa.
man 3-go **SS** snake 3-see
'When the man went, he saw the snake.'

(2) **ramo** 'different subject'
[Ava o-o **ramo**] mboi o-exa.
man 3-go **DS** snake 3-see
'When the man went, the snake saw him.'

The contraction **rã** is sometimes used in place of **ramo**.[3] Compare 3 with 2:

(3) **rã** 'different subject' (contraction of **ramo**)
[Ava o-o **rã**] mboi o-exa.
man 3-go **DS** snake 3-see
'When the man went, the snake saw him.'

In the above examples, the marking clauses appear in brackets; this practice will be followed throughout the paper. The marking clause can occur either before or after its reference clause. Compare 1', 2', and 3' with 1, 2, and 3 respectively:

(1') Ava o-exa mboi [o-o **vy**].
man 3-see snake 3-go **SS**
'The man saw the snake when he went.'

(2') Mboi o-exa ava [o-o **ramo**].
snake 3-see man 3-go **DS**
'The snake saw the man when he [the man] went.'

(3') Mboi o-exa ava [o-o **rã**].
snake 3-see man 3-go **DS**
'The snake saw the man when he [the man] went.'

Two types of elements sometimes occur after the switch reference markers, but are included within the brackets as part of the marking clause. The first type consists of modifiers to the clause as a whole, as in 4:

(4) Yvytu [oky **vy** e'ỹ].
wind rain **SS** NEG
'The wind blew, but not because of rain.'

In 4, **e'ỹ** 'negative' modifies the subordinate clause **oky vy** 'because of rain', or rather modifies the semantic relation holding between that clause and the main clause. Another such modifier is **ae** 'exactly, only'.

The second kind of element occurring after the switch-reference marker but within the brackets is a constituent (or the second part of a discontinuous construction) of the clause. It is typically a "heavy" expression:

(5) Apy i-kuai va'e ae t-o-mombe'u
here 3-be:PL REL exactly OPT-3-tell

o-i-kuaa ri **vy** xee a-j-apo vai-a-gue.
3-3-know COND **SS** 1SG 1SG-3-make bad-NR-PAST

'Let the very persons that are here tell what I have done wrong, if they know of such' (Acts 24.20).

In 5, **xee ajapo vaiague** 'what I have done wrong', though occurring after the SS marking, is the direct object of the verb **oikuaa** 'they know' in the marking clause.[4]

3.2 Subject, agent, and topic

In this section I establish the fact that in its primary or unmarked use, Mbyá switch reference is used to signal grammatical subject as opposed to the semantic category of agent or the pragmatic category of topic. For that reason, we will consider first agent, then topic, in relation to switch-reference marking.

3.2.1 Subject vs agent. By AGENT, I am referring to the initiator and controller of the action of the clause, when such exists. In the great majority of cases in Mbyá, agent is encoded as grammatical subject (Mbyá has no passive). With the

optative prefix t-, however, the agent and the subject are potentially distinct. That is the case in example 6:

(6) Pe-juka e'ỹ teĩ tove t-o-mano ha'e ae.
2PL-kill NEG ADVER OPT **OPT**-3-die 3:ANA exactly
'Without your (pl.) killing him, let him die all by himself.'

The grammatical subject in the optative verbal construction **(tove) tomano** 'let him die' is third person, as is indicated by the subject prefix **o-** '3'. The agent, however, is second person plural, the same as the subject and agent of **pejuka** 'kill'. In Mbyá, the optative can be characterized by comparing it to "straight" imperatives, which are signalled by a distinctive set of person prefixes. Like imperatives, optatives encode the speaker's will or desire. But whereas in imperatives the grammatical subject is the same as the agent and is second person (singular or plural), in optatives either the subject or the agent, or both, are different from the second person. In this sense, the optative can be considered to be a type of skewed imperative. In 6, for example, the agent is second person (plural), but the grammatical subject is third person.

Example 7 below gives the full sentence from natural text in which 6 occurred:[8]

(7) Pe-juka e'ỹ teĩ tove t-o-mano ha'e ae
2PL-kill NEG ADVER OPT **OPT**-3-die 3:ANA exactly

[o-karu e'ỹ **vy**].
3-eat NEG **SS**

'Without your (pl.) killing him, let him die all by himself, just from not eating' (T24.105).

In 7, the optative construction is followed by the clause **okaru e'ỹ vy** 'from his not eating' which has third person subject and SS marking. Thus, the switch-reference marking in 7 indicates that the grammatical subjects of the two clauses involved are the same; it does not indicate anything in regard to the agents.

An additional example of the same type is provided by 8 (repeated from 5:)

(8) Apy i-kuai va'e ae t-o-mombe'u
here 3-be:PL REL exactly **OPT**-3-tell

[o-i-kuaa ri **vy** xee a-j-apo vai-a-gue].
3-3-know COND **SS** 1SG 1SG-3-make bad-NR-PAST

'Let the very persons that are here tell what I have done wrong, if they know of such' (Acts 24.20).

8 is part of the Apostle Paul's defense before Felix. In this example as in 7, the SS marking indicates sameness of grammatical subject rather than anything to do with agent. (The agent of the optative construction 'tell' is Felix, whom Paul was addressing.) The above examples therefore illustrate the typical, primary, unmarked use of switch-reference marking in Mbyá, in signalling sameness or difference in the grammatical subject referents of the two clauses in question.

3.2.2 Subject vs topic. What has just been illustrated for semantic agent is true as well for the pragmatic notion of topic. By TOPIC, I am thinking specifically of sentence topic as opposed to discourse-level topic (Reinhart 1982); sentence topic is the type that is prominent referentially and syntactically in a given sentence. Sentence topics in Mbyá are often manifested both by fronting and by the occurrence of particles "in the crack" between the fronted constituent and the remainder of the sentence (Dooley 1982:323ff). Both of these indicators can be seen in 9:

(9) Compadre Galdino ma a-exa Roberto r-o py.
godfather Galdino BDY 1SG-see Robert EP-house in
'Compadre Galdino, I saw at Roberto's house.'

In 9, the direct object **compadre Galdino** occurs initially in the sentence rather than in its more neutral position following the verb, the basic word order being SVO (ibid.). Further, this constituent is set off from the rest of the sentence by the boundary particle **ma** which occurs between pragmatic constituents as a type of segmental realization of pause (Dooley 1977, 1982). Thus, **compadre Galdino** is indicated as sentence topic in 9.

9 is part of a text-initial sentence, the full text of which is given as 10:

(10) [Compadre Galdino ma a-exa Roberto r-o py
godfather Galdino BDY 1SG-see Robert EP-house in

ramo] ma gu-a'y-'i o-mombe'u.
DS BDY 3:REFL-son-DIMIN 3-tell

'Compadre Galdino, when I saw him at Roberto's house, talked about his little son' (T83.2).

Compadre Galdino, after being indicated as sentence topic in the initial clause of 10, continues to be referred to in the remaining clause ('talked about his little son') as subject and NP possessor. This continuity of reference is typical of

sentence topics. In 10, then, the topic does not undergo a change between clauses. The DS switch-reference marker, therefore, relates to the grammatical subjects of the two clauses rather than to the topics.

A further example of this type is 11:

(11) [Elefante ma ja-exa **ramo**] Ø-tuvixa.
elephant BDY 1+2-see **DS** 3-huge
'An elephant is huge to look at' (lit., 'When we see elephant, it is huge').

In 9, **elefante** is the sentence topic throughout both clauses. Since there is no discontinuity of topic, the DS switch-reference marking relates to grammatical subject.

3.3 Subject sets

In order to deal more exactly with complexities of subject reference, we introduce the notion of SUBJECT SETS. If we think of the grammatical subject of the marking clause as defining one set of referents and that of the reference clause as defining another, the straightforward cases for switch reference occur when the two subject sets are nonempty and either completely disjoint (containing no members in common) or equal (both containing exactly the same members, not simply the same number of members). Examples 2, 3, 10, and 11 show DS marking for nonempty and disjoint subject sets, while 1, 7, and 8 show SS marking for nonempty equal subject sets.

Throughout the paper, strategies for switch-reference marking in Mbyá will be presented by successive approximations. The first of these is given as 12:

(12) MBYA SWITCH-REFERENCE MARKING: STRAIGHTFORWARD CASES

1. When the subject sets are equal and nonempty, SS occurs.
2. When the subject sets are disjoint and nonempty, DS occurs.

The final version of the switch-reference rule is given later as 44.

The straightforward cases covered in 12 account for the vast majority -- over 98% -- of switch-reference constructions in Mbyá. Complexities are of the following three types: partial overlap of the two subject sets, empty subject sets, and syntactic complexity of different kinds. These complexities are dealt with in subsequent sections. In each case, it is not a random type of complexity that triggers a marked use of switch reference in Mbyá, but rather one that

complicates the comparison of the two subject sets, making difficult a speaker judgment as to whether the subject sets are the same or different.

4 STRICT INCLUSION OF NONEMPTY SUBJECT SETS

As just mentioned, the most straightforward cases for switch reference involve subject sets that are nonempty and either disjoint or equal. The only other alternative is for the two subject sets to be partially overlapping, having some but not all members in common. Partial overlap gives rise to a common type of indeterminacy for same-vs-different dichotomies.

In the corpus, all examples of partially overlapping subject sets in switch-reference constructions are of the strict inclusion type, in which one set is wholly contained in the other but is not equal to it.

The present section examines switch-reference constructions with strict inclusion holding between the subject sets. In Mbyá, the grammar manages to salvage a part of this domain for its own, but for the rest, switch-reference marking goes over to the semantico-pragmatic camp.

4.1 Strict inclusion with different grammatical person

Example 13 illustrates a switch-reference construction with strict inclusion of nonempty subject sets:

(13) [Pe-ro-via e'ỹ **rã**] ja-je'oi-pa tema.
2SG-COM-believe NEG **DS** 1+2-go:PL-all persistently
'If you don't believe it, let's all go [and see]'
(T10.87).

In 13, the subjects of the two clauses involve different grammatical person: 2PL in **perovia e'ỹ** 'you don't believe it' and 1+2, the first person plural inclusive, in **jaje'oipa tema** 'let's all go'. When grammatical person is different with strict inclusion, DS marking occurs.

In 13, it is the predicate 'let's all go' of the reference clause that has the larger subject set. In 14, the set inclusion is in the other direction, with the subject set of the marking clause strictly included in that of the reference clause:

(14) [Takua r-uxu ty guy py oro-exa **ramo**]
bamboo EP-huge COLL base in 1+3-see **DS**

nd-a-juka-i yvyra py.
NEG-1SG-kill-NEG wood INSTR

'Since we saw [the snake] in the bottom of a stand of bamboo, I wasn't able to kill it with a stick' (T71.4).
Furthermore, in 14 the grammatical persons are different than in 13: 1+3 (first person plural exclusive) and 1SG. What the two examples have in common is that DS marking occurs. As a matter of fact, that is the case in all such examples that have been found in the corpus: when in a switch-reference construction the subject sets are in a strict inclusion relationship, then DS marking occurs if they involve different grammatical person.

Change of grammatical person without strict inclusion of subject sets is not sufficient in order to condition DS marking. Consider 15:

(15) [[Amo-gue ja-je-ro-via ete va'e-kue
NSPEC-COLL 1+2-REFL-COM-believe really REL-PAST

r' vy] tema nhane-nhe'ẽ rei vy]
COND SS persistently 1+2-sound badly SS

o-o va'e-rã ng-uu ete amba py.
3-go REL-FUT 3:REFL-father really divine:home in

'If there are some of us who have really believed and thus keep on crying out, they will get to our true father's home' (T12.342).

In 15, the subject set consists of 'some of us' (**amogue** 'some' along with 1+2 subject marking), a category having elements of both first plural inclusive and third person. This subject set is constant through the three clauses of 15, but the grammatical person changes from 1+2 ('some of us') in the first two clauses to 3 ('they') in the final clause. The SS marking, which occurs twice, reflects the sameness of the subject sets rather than the change of grammatical person; it is covered by rule 1 of (12): When the subject sets are equal and nonempty, SS occurs. This example clearly points out that rule 1 has to do with identity of reference rather than identity of grammatical features.

4.2 Strict inclusion with same grammatical person

In this section we examine cases of strict inclusion of subject sets with the same grammatical person (i.e., both clauses have third person subject). Consider 16:

(16) [Xivi o-o t-ape r-upi vy]
jaguar 3-go NPOSSD-path EP-along SS

nh-ovaexĩ ka'i reve.
RECIP-meet monkey with

'When the jaguar was going along the path, he met up with the monkey' (T15.1).

In the second (reference) clause of 16, the verb **nhovaexĩ** contains the reciprocal prefix **nh-** (a variant of **jo-** or **nho-**), which by itself has the gloss 'they [the jaguar and the monkey] met up with one another'. This clause is an instance of what Schwartz (1988) calls verb-coded coordination. Another example would be:

(17) Ja-a ke xe-reve.
1+2-go polite:request 1SG-with
'Let's go together' (lit., 'Let's go with me').

An example from Chilean Spanish is:

(18) Fuimos al cine con mi madre.
'My mother and I went to the cinema' (lit., 'We went to the cinema with my mother') (Schartz 1988:54).

Thus, although verb-coded coordination need not include the reciprocal morpheme as in 16, "the predicates generally tend to involve reciprocal or mutual activities or motion" (Schwartz 1988:69). Pre- or postpositional phrases commonly found in verb-coded coordination often have a pre- or postposition with a comitative meaning (Spanish **con**, Mbyá **reve** 'with') (pp. 55, 64). Hence in 16, the fact that the second clause contains **ka'i reve** 'with the monkey' does not alter the fact that the subject set consists of both the jaguar and the monkey, although the postpositional phrase does seem to establish the jaguar as the leading participant in some sense. The SS marking in 16 is, as we shall see, a reflection of the fact that the two clauses of 16 have the same leading participant.

Compare 16 with 19:

(19) [["T-uu kuery ko o-u je-kuaa ma
3-father COLL opinion 3-come REFL-know already

voi," he-'i **ramo**] o-py gui ha'e javi-ve
early 3-say **DS** house-in from 3:ANA all-more

o-ẽ **vy**] o-nha-mba o-je'oi-vy.
3-go:out **SS** 3-run-all 3-go:PL-SER

'When he said "I see his parents coming!"
they all got outside and ran off' (T24.34).

Example 19, like 16, begins with a marking clause ("..." he'i 'he said') with a one-participant subject, followed by a reference clause (**opy gui ha'e javive oŏ** 'they all got outside') whose subject set strictly includes that of the marking clause. However, whereas 16 has SS marking between the two clauses, 19 has DS. Note that in 19, the subject of the first clause 'he said' does not continue as leading participant in the second and following clauses; there is a change of leading participant from 'he' to 'they all'.

Now let us reverse the order of containment and see examples in which the first clause in the switch-reference construction has the larger subject set:

(20) [[I-jypy jo-e irũ va'e-kue **vy**
3-beginning RECIP-ABL 3:companion REL-PAST **SS**

ae] jagua o-exa teĩ ka'i ka'aguy r-e **vy**]
exactly dog 3-see ADVER monkey woods EP-ABL **SS**

amo-gue jagua n-o-nhe'ẽ-i va'e ka'i r-e.
NSPEC-COLL dog NEG-3-sound-NEG REL monkey EP-ABL

'Since they [the dog and the monkey] had been companions in the beginning, some dogs, even when they see a monkey in the woods, will not bark at him' (T15.94).

(21) Ha'e rire [jo-guer-aa ma t-ape
3:ANA after RECIP-COM-go already NPOSSD-path

r-upi **ramo**] ka'i jagua pe aipo-e-'i, "..."
EP-along **DS** monkey dog DAT ATTN-3-say

'After that, as they [the dog and the monkey] were going along with each other along the road, the monkey said to the dog, "..."' (T15.55).

In both 20 and 21 the first clause has a plural subject set (dog and monkey), as seen from the reciprocal morphemes that occur. Further, in each case the second clause has only one of these participants as its subject. In both examples the first clause is a marking clause and the second is the reference clause of the first. 20, however, has SS marking, whereas 21 has DS. The explanation seems to be along the same lines as above. 21 is a paragraph-initial sentence, as indicated by its initial phrasal conjunction **ha'e rire** 'after that' (Dooley 1986:57ff), and no leading participant is assumed from preceding material; it must be explicitly established. This is exactly what happens in the second clause, as **ka'i** 'monkey' initiates the conversation. That is to say, in 21 it would not

be correct to say that the two clauses have the same leading participant. Example 20, however, is the second sentence in its paragraph, and in fact is a restatement of the first sentence, whose translation runs as follows: 'As a result of that [incident], right up to the present time when a dog sees a monkey in the woods, some won't bark at them.' That is, the paragraph is about dogs and what they will do when they see a monkey. Since 'dog' is included in the subject set of the first clause of 20 (**ijypy joe irũ va'ekue** 'they had been companions in the beginning'), it seems reasonable to interpret the SS marking on that clause as indicating a continuity of the leading participant.

Let us consider one further example, one which is similar to 16, but whose reference clause precedes the marking clause:

(22) **Ha'e rire je ka'i xivi pe aipo-e-'i jevy**
3:ANA after HSY monkey jaguar DAT thus-3-say again

[jo-guer-aa jevy ma vy], "..."
RECIP-COM-go again already **SS**

'After that, the monkey again said to the jaguar while they were going along with each other, "You go that way. I'll go this way"' (T15.18).

In the first clause of 22, **ka'i xivi pe aipoe'i jevy** 'the monkey again said to the jaguar', the monkey is established as the leading participant. Even though the second clause **joguera jevy ma** 'they were going along with each other' with its reciprocal prefix **jo-** is formally symmetrical in regard to which participant is taking the initiative, the SS marking can well be interpreted to mean that the monkey continues as the leading participant; the content of the monkey's speech that is furnished in the free translation of 22 ('You go that way. I'll go this way.') illustrates what is true throughout most of the story: the monkey is the one who is making things happen.

4.3 Agent/topic

In discussing the examples in section 4.2, I have used the term "leading participant" in an intuitive sense. Such a participant seems to be identifiable by some combination of agent and topic properties, the salient features varying from context to context. In what follows, I will refer to such a subject referent as an agent/topic. In this section I have tried to illustrate, by means of successive examples, that in switch-reference constructions in which the subject sets are nonempty and show both strict inclusion and the same grammatical person, the switch-reference marking indicates whether or not the participants represented by the smaller

subject set should be considered as agent/topic in both clauses.

With that in mind, the rules for Mbyá switch reference can be updated as follows to cover all cases of nonempty subject sets:

(23) MBYA SWITCH-REFERENCE MARKING: NONEMPTY SUBJECT SETS

1. When the subject sets are equal and nonempty, SS occurs.
2. When the subject sets are disjoint and nonempty, DS occurs.
3. When the subject sets are nonempty with strict inclusion, and
   a. the subjects have different grammatical person, DS occurs.
   b. the subjects have the same grammatical person, and if
      i. the clauses are presented as having the same agent/topic, SS occurs;*
      ii. otherwise, DS occurs.*

* involves a semantic or pragmatic condition beyond subject reference per se

Since agent/topic is a semantico-pragmatic notion that goes beyond subject reference per se, condition 3b in 23 represents the first marked use of Mbyá switch reference that we have considered in this paper.

5 EMPTY SUBJECT SETS

Up to this point we have not considered empty subject sets. An empty subject set is automatically disjoint from any other set and strictly included in any nonempty set, and any two empty subject sets are equal. Even though we can use these set-theoretical terms to describe them, empty subject sets do not follow the same rules for switch-reference marking that nonempty sets do.

In this section we will first make a brief survey of the types of empty subject clauses that are found in Mbyá. Then we consider the relatively simple case of when just one of the subject sets is empty, and finally what happens when both subject sets are empty.

5.1 Impersonal, temporal, and ambient clauses

In investigating Mbyá switch reference, it is useful to distinguish three types of empty subject clauses: impersonal, temporal, and ambient clauses.

Impersonal clauses in Mbyá are indicated by the verbal suffix **-a** 'impersonal', which co-occurs only with third-person subject marking.

(24) Avaxi o-guer-u-pa-**a** o-py.
corn 3-COM-come-all-**IMPERS** house-in
'The corn was all brought inside.'

The impersonal suffix in Mbyá blocks any act of reference to a grammatical subject; no other (overt) argument is promoted to subject, and the (logical) subject is never expressed by means of an oblique phrase. As in certain other languages, impersonal clauses occur not only with transitive verbs, as in 24, but also with intransitive ones (cf. Comrie 1977):

(25) Ava-ve rei nd-o-u-**a**-i.
man-none badly NEG-3-come-**IMPERS**-NEG
'No one at all came.'

In 25, the impersonal clause occurs with the intransitive stem **u** 'come', whereas in 24 it occurs with the transitive stem **gueru** 'bring' which is derived from the same root.

The second type of empty-subject clauses are clauses consisting of only a predicate which is a noninflected word, usually a noun, adjective, or adverb. (Actually I am concerned here with the phrasal counterparts of these categories, but in most cases only a single word is involved.) Clauses consisting of noninflected words are of the two major types, temporal clauses and ambient clauses.

Temporal clauses involve words such as **ka'aru** 'afternoon', **are** 'a long time', and **ko'ẽ** 'dawn', as well as partial borrowings from the Portuguese such as **quatro hora jave** 'at four o'clock'. Such words may occur alone, as in 26:

(26) Ka'aru.
afternoon
'It's late.'

Or, they may take modifiers of different types:

(27) Ka'aru porã.
afternoon well
'It's a nice afternoon.'

(28) Ka'aru ma.
afternoon already.
'It's already getting late.'

Ambient clauses concern meteorological phenomena and involve

words such as **yvytur** 'wind', **okyr** 'rain', **arair** 'cloud', **overar** 'lightning', **yapur** 'thunder', and **pytũ** 'darkness'. Just as in temporal clauses, ambient words may either occur singly or with modifiers, as in 29:

(29) Kuee arai-pa.
yesterday cloud-all
'Yesterday it was completely cloudy.'

5.2 Only one empty subject set

Since impersonal clauses have empty subject sets, they always show DS marking with respect to clauses with nonempty subject:

(30) Aỹ ma aje'i-ve gua-re a-mombe'u ta,
now BDY ET-more NR-PAST 1SG-tell about:to

[aỹ o-vaẽ-a rã] nde-ayvu aguã.
now 3-arrive-**IMPERS** **DS** 2SG-speech PURP

'Now I'm going to tell about what we were talking about before, so that now when someone arrives you will know how to speak to them' (T78.1).

Example 30 was spoken to me by one of my Mbyá tutors who had observed deficiencies in my (cultural practice of) hospitality, and was trying to teach me how to be a good host. The first clause is the main clause; the second and third ones (in the second line) involve a switch-reference construction embedded in a purpose clause. The second (marking) clause **aỹ ovaẽa** 'now (someone) arrives' has empty subject reference, and the third (reference) clause has a nonempty (second person singular) subject. The switch-reference marking is DS.

This illustrates the following rule: whenever only one clause in a switch-reference construction has an empty subject, DS marking occurs. In example 31 this is illustrated with a temporal clause:

(31) [Ko'ẽ rã] ja-juka va'e-rã uru.
dawn **DS** 1+2-kill REL-FUT chicken
'Tomorrow we will kill a chicken.'

In sentences such as 31, the expression **ko'ẽ rã** 'dawn DS' is lexicalized to mean 'tomorrow'. In 31, DS marking is found with an ambient clause:

(32) [Oky **ramo**] ava-ve rei nd-o-o-i.
rain **DS** man-none badly NEG-3-go-NEG
'Since it was raining, no one went.'

5.3 Two empty subject sets

When both subject sets are empty, as has been mentioned, they are at the same time disjoint and equal. This makes for predictable complications when 12 is the basic rule. It is also an atypical situation linguistically. We consider the following two main cases: (i) when both clauses are of the same semantic type (impersonal, temporal, or ambient); and (ii) when the clauses are of mixed types.

5.3.1 Clauses of the same semantic type. First, we examine examples of switch-reference constructions in which two empty subject clauses are of the same semantic type. When two impersonal clauses occur together in a coordinate or subordinate construction, the suffix **-a** 'impersonal' need not be present in both. Example 33 is of this type:

(33) O-mombe'u-a va'e-rã ha'e o-j-apo va'e-kue
3-tell-IMPERS REL-FUT 3:ANA 3-3-make REL-PAST

[hexe i-ma'endu'a **vy**].
3:ABS 3-remember **SS**

'(They) will tell what she has done, remembering her' (Mark 14.9).

Both clauses in 33 are interpreted as having empty subjects.

Two temporal clauses have not been found in a switch-reference construction, but 34 (repeated from 4) shows two ambient clauses:

(34) Yvytu [oky **vy** e'ỹ].
wind rain **SS** NEG
'The wind blew, but not because of rain.'

35 also has two ambient clauses:

(35) Arai vaipa, [oky-xe **vy**].
cloud much rain-want **SS**
'It's very cloudy, since it's wanting to rain.'

Examples such as the above illustrate the rule that, for two empty-subject clauses of the same semantic type, SS marking occurs.*

5.3.2 Clauses of mixed types. The following sentences show switch-reference constructions with mixed types of empty-subject clauses. Example 36 has an ambient clause followed by an impersonal clause:

(36) [Oky **rã**] nd-o-u-a-i.
rain **DS** NEG-3-come-IMPERS-NEG
'When it rains, no one comes.'

37 shows a temporal and an impersonal clause:

(37) [Ko'ẽ **rã**] nd-o-u-a-i 'rã ava-ve rei.
dawn **DS** NEG-3-come-**IMPERS**-NEG FUT man-more badly
'Tomorrow no one at all will come.'

And 38 shows a temporal clause and an ambient clause:

(38) [Ko'ẽ **rã**] arai-pa va'e-rã.
dawn **DS** cloud-all REL-FUT
'Tomorrow it will be all cloudy.'

In these constructions with mixed types of empty-subject clauses, DS marking is found. With two empty subject sets, therefore, switch reference signals a semantic fact that does not have to do with grammatical subject per se: namely, whether the clauses have the same or different semantic type.

The description of switch reference up to this point can therefore be given as follows:

(39) **MBYA SWITCH-REFERENCE MARKING: PREFINAL VERSION**

1. When the subject sets are equal and nonempty, SS occurs.
2. When the subject sets are disjoint and nonempty, DS occurs.
3. When the subject sets are nonempty with strict inclusion, and
   a. the subjects have different grammatical person, DS occurs.
   b. the subjects have the same grammatical person, and if
      i. the clauses are presented as having the same agent/topic, SS occurs;*
      ii. otherwise, DS occurs.*
4. When one of the subject sets is empty
   a. but the other is nonempty, DS occurs;
   b. and the other is empty as well, and if
      i. the clauses are of the same semantic type (either impersonal, temporal, or ambient), SS occurs;*
      ii. the clauses are of mixed semantic types, DS occurs.*

* involves a semantic or pragmatic condition beyond subject reference per se

6 RESIDUAL FACTORS

There remain a few disquieting examples. A brief survey is instructive in suggesting possible factors other than those that we have considered thus far.

(40) [Ita ova o-Ĩ-a py o-vaĕ o-je'oi-vy
stone face 3-be:located-NR in 3-arrive 3-go:PL-SER

ramo] mba'e-ve rei nd-o-exa-i.
DS thing-more badly NEG-3-see-NEG

'When they all arrived where the stone bluff was, they didn't see a thing' (T11.143).

In 40, the two clauses have coreferential subjects and involve no particular complexity of the types we have been considering, yet DS occurs. It seems likely that a genuine performance error is involved. This is a written text by a new writer, and did not undergo editing. An error is understandable in view of the fact that there is more than one common way to narrate a perception event of this type: the above is one way, with the second clause having a verb of seeing; a second way would have a verb of existence in the second clause ('not a thing was there'). It is not at all unusual, especially for new writers, to finish a sentence in a different way than they began it. An existence verb in the second clause ('there was nothing') would of course require DS marking.

A second type of residue is presented in 41:

(41) [Xee ri xe-r-eka **vy**] ma
1SG RESP 1SG-EP-seek **SS** BDY

tove ko-va'e kuery t-o-je'oi-pa.
OPT D1-REL COLL OPT-3-go:PL-all

'If it's me you are seeking, may all these go' (John 18.8).

This example is from the Mbyá New Testament, consisting of Jesus's words to the guards who arrested him. The subject of the first clause is second person plural (when the object marking is first person, subject marking does not occur), and the second clause is optative with third person plural subject, albeit with second person plural agent. Therefore, according to the discussion in Sect. 3.2.1, we should expect DS marking instead of the SS that occurs. This example, unlike 40, has been checked by experienced Mbyá editors and is not likely to be a performance error. It appears here that the

switch reference is signalling continuity of agent, but the reason for this is not clear. It is true that the referential complexity in 41 is considerable: in addition to the optative in the second clause separating the grammatical subject from the agent, there is the fact that the participants include first person singular (Jesus), second person plural (the guards), and third person plural (the disciples). It is an open question at this point whether the agent/topic mode of switch reference can be optionally triggered by referential complexity of diverse kinds, not just by strictly included or empty subject sets.

Two final examples will be discussed together:

(42) [Nhande-r-u-ete o-me'ẽ va'e-kue **vy** 'rã-e]
1+2-EP-father-real 3-give REL-PAST **SS** FUT-exactly

ja-r-eko.
1+2-COM-live

'It's only when [something] is what our true father has given that we have it' (John 3.27).

(43) [Nhande **ae** nha-nho-tỹ va'e-kue-'i **vy**
1+2 exactly 1+2-TR-plant REL-PAST-DIMIN **SS**

ae] ja-'u-xe-a-'i rami ja-'u.
exactly 1+2-eat-want-NR-DIMIN like 1+2-eat

'Only if [what we have to eat] is what we ourselves have planted, will we be able to eat it in a way that satisfies our appetite' (lit., 'like we want to eat it') (T76.13).

Both 42 and 43 involve disjoint subject sets and SS marking. In both, the first (marking) clause is nominalized on its direct object (the nominalizer, inflected for past tense, is **va'ekue**): 'what our true father has given' in 42, and 'what we ourselves have planted' in 43. These referents are the grammatical subject of the first clauses in their respective examples, and occur as well as direct object of the second (reference) clauses. In both examples, it appears that the switch-reference marking signals continuity of topic rather than difference in subjects. As in 41, the two above examples are rather rich in reference: both examples have 1+2 as well as the same direct object in both clauses. So the same question is raised, as to whether referential complexity can here be triggering the marked use of switch reference in signalling agent/topic. A related question here is whether the syntactic complexity of nominalization enters in, since this

device changes the direct object of the first clause in each case to the grammatical subject.

There is little that we can conclude from such examples, since they are so rare in occurrence (the four above are gleaned from more than 3000 switch-reference constructions). But they do seem to illustrate the following, which relates not only to switch reference but to other kinds of primarily grammatical phenomena as well. Once we get beyond the kind of grammatical rule that holds for the great majority of cases and into factors having to do with discourse, pragmatics, and sentence processing, we are in an open-ended situation where it is not always possible -- and in principle should not be possible -- to explain all cases by means of rule. It is the nature of grammar to govern the vast majority of cases by recourse to a bare minimum of factors; the few cases that remain outside grammar are open to the impact of whatever extragrammatical factors there are. So although the effects may not always be predictable by rule, they should have plausible post hoc external explanations.

The analysis of switch-reference marking adopted in this paper, then, is given in 44:

(44) MBYA SWITCH-REFERENCE MARKING

1. When the subject sets are equal and nonempty, SS occurs.
2. When the subject sets are disjoint and nonempty, DS occurs.
3. When the subject sets are nonempty with strict inclusion, and
   a. the subjects have different grammatical person, DS occurs.
   b. the subjects have the same grammatical person, and if
      i. the clauses are presented as having the same agent/topic, SS occurs;*
      ii. otherwise, DS occurs.*
4. When one of the subject sets is empty
   a. but the other is nonempty, DS occurs;
   b. and the other is empty as well, and if
      i. the clauses are of the same semantic type (impersonal, temporal, or ambient), SS occurs;*
      ii. the clauses are of mixed semantic types, DS occurs.*
5. There are likely residual factors that trigger other signalling of agent/topic.*

* involves a semantic or pragmatic condition beyond subject reference per se

7 CONCLUDING REMARKS

In this paper I have surveyed switch reference in Mbyá Guarani. The great majority of cases can be covered by a grammatical rule stated in terms of the grammatical subjects of the two clauses involved, yielding 'same subject' or 'different subject' markers. In sentences where this subject-related dichotomy is complex, switch-reference marking can instead be used to indicate facts of a semantic or pragmatic nature, such as whether the two clauses have the same agent/topic or the same semantic type. These are considered marked uses of Mbyá switch reference. Certain aspects of these uses can be described by rules similar to grammatical ones, but the description is essentially of the external variety, depending on factors outside the formal system.

Mbyá switch reference is therefore one example of linguistic phenomena that are conditioned by grammatical features and are amenable to description by grammatical rule, but only in the unmarked case. In marked modes of use, they are conditioned by extragrammatical factors. More specifically, we have seen that Mbyá switch reference is a "fair-weather phenomenon", one whose marked uses are triggered by complexities that arise with its unmarked use. In this division of labor, grammar covers as many cases as it can, subject to some law of diminishing returns.

Two questions arise in connection with the type of description represented by this paper. First, how common are phenomena that require a mix of internal and external descriptions? It is a common experience that even one's best analyses turn out to have a bit of residue, and this residue may be symptomatic of such a mix. Even though it may account for only a small percentage of the data, it may have an importance out of proportion to its frequency if we are interested in the interaction of grammatical and extragrammatical factors and the "limits and possibilities of grammatical theory" (cf. the title of Newmeyer 1983).

A second question arises: Does the existence of fair-weather phenomena like Mbyá switch reference mean that there could be limits to the complexity of entry conditions for grammatical rules? Given a broadly functional view of language, it would be surprising if any absolute, rigid limit existed; but it would be surprising as well if there were not some kind of variable limit imposed by practical conditions of language processing.

Notes

1. Mbyá is one of several dialects of Guaraní, a language of the Tupí-Guaraní family. It is spoken by a total of perhaps 7000 speakers in northern Argentina, southern Brazil, and eastern Paraguay. The present study is based on field work carried out from 1975 through 1988 at the Posto Indígena Rio das Cobras, Paraná, Brazil, under the auspices of the Summer Institute of Linguistics. The author wishes to acknowledge the helpful comments of Albert Bickford in the preparation of the manuscript; any errors, however, remain his own.

2. The transcription of Mbyá data in the present study is in the practical orthography. Mbyá has six vowels: i, ɨ (written y), u, e, a, and o. It has fourteen consonants: p, t, š (written x), k, kʷ (written ku), ʔ (glottal stop, written with an apostrophe), h, m (written mb preceding oral vowels), n (written nd preceding oral vowels), ɲ (written nh preceding nasal vowels and j preceding oral vowels), ŋ (written ng), ŋʷ (written gu), v, and r. Nasalization holds throughout a word whose final syllable is written either with a tilde or with one of the consonant symbols m n nh, and is also regressive from any of the consonants m n ng.

The following abbreviations are used in glosses throughout this paper:

ABL	ablative
ADVER	adversative
ANA	anaphora
ATTN	attention
BDY	boundary marker
COLL	collective
COM	comitative
COND	conditional
DAT	dative
DIMIN	diminutive
DS	different subject
D1	deictic of first person
EP	epenthesis
ET	earlier today
FUT	future
HSY	hearsay
IMP	imperative
IMPERS	impersonal
INSTR	instrumental
NEG	negative
NPOSSD	nonpossessed
NR	nominalizer
NSPEC	nonspecific
OPT	optative
PAST	past

PL	plural
PURP	purpose
RECIP	reciprocal
REFL	reflexive
REL	relativizer
RESP	response
SER	indicator of serial verb
SG	singular
SS	same subject
TR	transitivizer
1	first person
1+2	first person plural inclusive
1+3	first person plural exclusive
2	second person
3	third person

3. In Mbyá, contractions are conditioned by factors that often co-occur with contractions in other languages. They frequently occur in formulaic expressions such as **ko'ẽ rã** (dawn DS) 'the following day, tomorrow', and also when the speaker is evidencing curtness (for whatever reason) with the hearer.

4. Examples that are accompanied by text and line number are in texts that may be obtained from:

Summer Institute of Linguistics
SAI/No, Lote D, Bloco 3
70770 Brasilia, DF
Brazil

Ask for Mbyá Guarani texts of the desired number, or for the complete set.

5. In section 2.3, reference was made to certain particles in Mbyá which can occur "in the cracks" between constituents. One example is **ma**, glossed 'boundary (BDY)', since it has no other function. When such particles occur following a switch-reference clause, they are not bracketed with the clause.

6. There are a few instances of a negative plus SS marking used in a disjunctive construction. Observe the following:

Três hora jave e'ỹ vy ma quatro hora jave 'rã.
three hour during NEG SS BDY four hour during FUT
'If not at three o'clock, then at four [I will come]'
(T79.10).

Such examples are not included in the analysis of this paper.

References

Axmaker, Shelley, Annie Jaisser, and Helen Singmaster, eds. 1988. Proceedings of the Fourteenth Annual Meeting of the Berkeley Linguistics Society: General session and parasession on grammaticalization. Berkeley, CA: Berkeley Linguistics Society.

Chomsky, Noam. 1965. Aspects of the theory of syntax. Cambridge, MA: MIT Press.

Comrie, Bernard. 1977. In defense of spontaneous demotion: the impersonal passive. Syntax and semantics, vol. 8: Grammatical relations, ed. by Peter Cole and Jerrold M. Sadock, 47-58. New York: Academic Press.

_____. 1981. Language universals and linguistic typology. Oxford: Blackwells and Chicago: U. of Chicago Press.

Dooley, Robert A. 1977. A constituent boundary marker in Guarani. Arquivos de Anatomia e Antropologia. Instituto de Antropologia Professor Souza Marques. 2.147-55.

_____. 1982. Options in the pragmatic structuring of Guarani sentences. Lg. 58.307-31.

_____. 1986. Sentence-initial elements in Brazilian Guarani. Sentence initial devices, Summer Institute of Linguistics Publications in Linguistics, no. 75, ed. by Joseph E. Grimes, 45-69. Dallas, TX: Summer Institute of Linguistics and the University of Texas at Arlington.

_____. to appear. Positioning of particles and clitics in lowland South American languages. Amazonian Linguistics: Studies in Lowland South American Languages, ed. by Doris L. Payne. Austin: U. of Texas Press.

Haiman, John and Pamela Munro. 1983b. Introduction. Switch-reference and universal grammar, ed. by Haiman and Munro, ix-xv. Amsterdam: John Benjamins.

Hyman, Larry M. 1984. Form and substance in language universals. Explanations in language universals, ed. by Brian Butterworth, Bernard Comrie, and Osten Dahl, 67-85. Berlin: Mouton.

Newmeyer, Frederick J. 1983. Grammatical theory: its limits and its possibilities. Chicago: U. of Chicago Press.

Nunberg, Geoffrey. 1981. Validating pragmatic explanations. Radical pragmatics, ed. by Peter Cole, 199-222. New York: Academic Press.

Reinhart, Tanya. 1982. Pragmatics and linguistics: an analysis of sentence topics. Bloomington, IN: Indiana U. Linguistics Club.

Schwartz, Linda. 1988. Conditions for verb-coded coordinations. Studies in syntactic typology, ed. by Michael Hammond, Edith A. Moravcsik and Jessica R. Wirth, 53-73. Amsterdam: John Benjamins.